CLAIMS

WHAT IS CLAIMED IS:

1. A computer system for use with web-based applications comprising:

   a web browser application;

   at least one web form running on the web browser;

   a web server capable of processing Java code and web-based forms;

   a storage schema coupled to said computer system, wherein said web server is used for manipulating data with rules compiled in said web browser from said storage schema; and

   files containing manipulation rules in said storage schema.

2. A computer system according to claim 1, wherein the web server comprises an application for compiling at least one Java page including manipulation rules from the storage schema.

3. A computer system according to claim 1, wherein the web server calls a plurality of Java servlet methods including getManipulationSet(String ApplicationName, String Application Version, String Application User) method and doManipulation(String tag, String value) method.

4. A computer system according to claim 1, wherein Java servlet methods are compiled into byte code files when the web server is started.

5.   A computer system according to claim 4, wherein the web server calls a plurality of

Java servlet methods including getManipulationSet(String ApplicationName, String

Application Version, String Application User) method.

6.   A computer system according to claim 5, wherein the web server calls a Java

servlet method doManipulation(String tag, String value).

7.   A computer system according to claim 1, wherein said manipulation rules comprise

at least three main views of hierarchical organized functions.

8.   A computer system according to claim 7, wherein the web server calls a plurality of

Java servlet methods including getManipulationSet(String ApplicationName, String

Application Version, String Application User) method and doManipulation(String tag,

String value) method.

9.   A computer system according to claim 7, comprising a storage schema in the

format of an Oracle database.

10.   A computer system according to claim 7, wherein said manipulation rules are

represented in the form of Lightweight Directory Access Protocol.

11.   A computer system according to claim 4, further comprising an Oracle database

and a table-based system of rules organized into three hierarchically organized views.

12. A computer system according to claim 4, wherein said storage schema is represented by Lightweight Directory Access Protocol and includes three hierarchically organized views.

13. A web server system comprising:

a plurality of web browser applications;

means for performing manipulation service on data submitted by said at least one of the web browser applications;

means for processing web forms;

means for storing and retrieving a plurality of manipulation rules for performing said manipulation service; and

means for compiling manipulation rules into said at least one web application in order to perform said manipulation service.

14. A web server system according to claim 13, comprising means for initiating a recompiling of said at least one web application.

15. A web server system according to claim 13, wherein said means for storing and retrieving manipulation rules comprises an Oracle database.

16. A web server system according to claim 13, wherein said manipulation rules are

stored in a schema in the form of Lightweight Directory Access Protocol.

17.   A web server system according to claim 14, wherein said Oracle database contains a table-based system of rules organized into at least three hierarchically organized views.

18.   A web server system according to claim 14, further comprising a schema in the form of Lightweight Directory Access Protocol and a table-based system of manipulation rules organized into at least three hierarchically-organized views.

19.   A web server system according to claim 17, wherein said Oracle database stores manipulation functions stored as hierarchically organized views that are dynamically updateable by an external administrator.

20.   A web server system according to claim 18, wherein said storage schema represented by Lightweight Directory Access Protocol represents manipulation functions stored as hierarchically-organized views that are dynamically updateable by an external administrator.

21.   A web server system according to claim 13, comprising means for compiling Java servlet methods.

22.   A web server system according to claim 21, comprising means to initiate a recompile of a web server in order to load updated manipulation rules.

23.   A computer-readable medium with instructions executable by a processor for

providing a manipulation application service for web-based applications, the medium

comprising instructions to:

couple a service request from a data device to a web server, the request including

data to be validated;

generate a service session instruction, the service session instruction based at least

in part on the service request;

send the service session instruction to one or more web servers, the service session

instruction corresponding to one or more data manipulation requests from said customer

data device;

compile at least one Java Server Page based on stored manipulation rules in a

database; and

send a manipulation service response to the data device, wherein the manipulation

service response is based on the service request.

24.   A method of providing manipulation data service with a web-based computer

system comprising the steps of:

calling at least one Java server page from a web application;

compiling said at least one Java server page at a web server;

retrieving stored manipulation rules from a centralized storage mass coupled to said

web server;

inputting data to a web form;

26

submitting the web form to the web browser;

manipulating data provided from said web application in accordance with said

manipulation rules.

25.   A method according to claim 24, further comprising the step of

updating at least a portion of compiled manipulation rules by recompiling at least one Java

server page.

26.   A method according to claim 24, comprising the step of calling a Java servlet

method including getManipulationSet(String ApplicationName, String Application

Version, String Application User) method and doManipulation(String tag, String value)

method.

27.   A method according to claim 24, comprising the step of loading at least portion of

said manipulation rules into objects.

28.   A method according to claim 26, comprising the step of said Java server page

directing JavaScript functions in accordance with said manipulation rules.

29.   A method according to claim 28, comprising the step of periodically recompiling at

least one Java server page.

30.   A method according to claim 28, comprising the steps of deleting class files and

recompiling at least one Java server page.

31.   A method according to claim 28, comprising the step of loading updated manipulation rules.

32.   A method according to claim 24, comprising the step of sending a manipulation result to the web application.

33.   A method according to claim 28, comprising the step of sending a manipulation result to a user of the web application.

34.   A method for validating data with a web server system, the method comprising:

a step for sending a data manipulation service request from a web user;

a step for generating a manipulation service instruction, the service instruction based at least in part on the manipulation service request from said web user;

a step for compiling a Java server page containing Java files into class files;

a step for reading data manipulation information from a data schema;

a step for configuring the data manipulation information in the memory of a running program;

a step for directing a JavaScript function in order to execute a manipulation function in accordance with the information read from said data schema.

35.   A method according to claim 34, further comprising a step of a Java server page

28

directing JavaScript functions in accordance with said manipulation information.

36.   A method according to claim 35, further comprising a step of recompiling at least one Java server page with updated manipulation information.

37.   A method according to claim 34, further comprising the step of deleting at least a portion of the class files and recompiling at least one Java server page.

38.   A method according to claim 34, further comprising the step of loading updated manipulation information in the memory of the program.